



SEQUENCE LISTING

<110> Bramberg, Richard

<120> Methods of Inhibiting Inflammation

<130> 18989-033

<140> 10/808,052

<141> 2004-03-24

<150> 60/457,048

<151> 2003-03-24

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<170> PatentIn Ver. 2.1

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<223> Description of Artificial Sequence:chemically synthesized siRNA

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Gly Lys Leu Gln Asp Ser Val Gly Tyr Arg Ile Ser Ser Asn Val Asp
50 55 60
Val Ala Leu Leu Trp Arg Asn Pro Asp Gly Asp Asp Asp Gln Leu Ile

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Lys Glu Asn Leu Glu Ala Leu Gln Arg Pro Thr Leu Leu His Leu Ile	115	120	125
His Gly Lys Val Lys Glu Phe Tyr Ser Tyr Gln Asn Glu Ala Val Ala	130	135	140
Ile Glu Asn Ile Lys Arg Gly Leu Ala Ser Leu Phe Gln Thr Gln Leu	145	150	155
Ser Ser Gly Thr Thr Asn Glu Val Asp Ile Ser Gly Asn Cys Lys Val	165	170	175
Thr Tyr Gln Ala His Gln Asp Lys Val Ile Lys Ile Lys Ala Leu Asp	180	185	190
Ser Cys Lys Ile Ala Arg Ser Gly Phe Thr Thr Pro Asn Gln Val Leu	195	200	205
Gly Val Ser Ser Lys Ala Thr Ser Val Thr Thr Tyr Lys Ile Glu Asp	210	215	220
Ser Phe Val Ile Ala Val Leu Ala Glu Glu Thr His Asn Phe Gly Leu	225	230	235
Asn Phe Leu Gln Thr Ile Lys Gly Lys Ile Val Ser Lys Gln Lys Leu	245	250	255
Glu Leu Lys Thr Thr Glu Ala Gly Pro Arg Leu Met Ser Gly Lys Gln	260	265	270
Ala Ala Ala Ile Ile Lys Ala Val Asp Ser Lys Tyr Thr Ala Ile Pro	275	280	285
Ile Val Gly Gln Val Phe Gln Ser His Cys Lys Gly Cys Pro Ser Leu	290	295	300
Ser Glu Leu Trp Arg Ser Thr Arg Lys Tyr Leu Gln Pro Asp Asn Leu	305	310	315
Ser Lys Ala Glu Ala Val Arg Asn Phe Leu Ala Phe Ile Gln His Leu	325	330	335
Arg Thr Ala Lys Lys Glu Glu Ile Leu Gln Ile Leu Lys Met Glu Asn	340	345	350
Lys Glu Val Leu Pro Gln Leu Val Asp Ala Val Thr Ser Ala Gln Thr	355	360	365
Ser Asp Ser Leu Glu Ala Ile Leu Asp Phe Leu Asp Phe Lys Ser Asp	370	375	380
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Ser His Pro Asn Glu Glu Leu Leu Arg Ala Leu Ile Ser Lys Phe Lys	405	410	415

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 Thr Gly Arg Gly Tyr Val Ser Gln Lys Arg Lys Glu Ser Val Leu Ala
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 primer

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 primer

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Leu Xaa Lys Xaa Xaa Tyr Asn Tyr Glu Ala Glu Ser Ser Ser Gly Val
50 55 60
Pro Gly Thr Ala Xaa Ser Arg Ser Ala Thr Arg Xaa Asn Cys Lys Xaa
65 70 75 80
Glu Leu Glu Val Pro Gln Leu Cys Ser Phe Ile Leu Lys Xaa Ser Gln
85 90 95
Cys Thr Leu Lys Glu Val Tyr Gly Phe Asn Pro Glu Gly Lys Ala Leu
100 105 110
Leu Lys Lys Thr Lys Asn Ser Xaa Glu Xaa Ala Ala Ala Met Ser Arg
115 120 125
Xaa Glu Leu Lys Leu Ala Ile Pro Glu Gly Lys Gln Val Phe Leu Tyr
130 135 140
Pro Glu Lys Asp Glu Pro Thr Tyr Ile Leu Asn Ile Lys Arg Gly Ile
145 150 155 160
Ile Ser Ala Leu Leu Val Pro Pro Glu Xaa Glu Glu Ala Lys Gln Xaa
165 170 175
Leu Phe Xaa Asp Thr Val Tyr Gly Asn Cys Ser Thr His Phe Thr Val
180 185 190
Lys Thr Arg Xaa Gly Asn Xaa Ala Thr Xaa Xaa Ser Thr Glu Arg Asp
195 200 205
Leu Gly Gln Cys Asp Arg Phe Lys Pro Ile Arg Thr Gly Ile Ser Pro
210 215 220
Xaa Ala Leu Ile Lys Gly Met Xaa Arg Pro Leu Ser Thr Leu Ile Xaa
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<221> VARIANT
<222> (1)..(335)
<223> Wherein Xaa is any amino acid.

<400> 12

Met	Gly	Cys	Leu	Leu	Phe	Leu	Leu	Leu	Trp	Ala	Leu	Leu	Gln	Ala	Trp
1				5					10					15	
Gly	Ser	Ala	Glu	Val	Pro	Gln	Arg	Leu	Phe	Pro	Leu	Arg	Cys	Leu	Gln
			20					25					30		
Xaa	Ser	Xaa	Phe	Ala	Asn	Ser	Ser	Trp	Thr	Arg	Thr	Asp	Xaa	Leu	Ala
		35					40					45			
Trp	Xaa	Gly	Glu	Leu	Gln	Xaa	His	Ser	Trp	Ser	Asn	Asp	Xaa	Asp	Thr
	50					55					60				
Val	Xaa	Ser	Leu	Xaa	Pro	Xaa	Xaa	Gln	Gly	Thr	Phe	Ser	Asp	Gln	Gln
65					70					75					80
Trp	Glu	Thr	Leu	Gln	His	Ile	Phe	Arg	Val	Tyr	Arg	Ser	Ser	Phe	Thr
			85						90					95	
Arg	Asp	Val	Lys	Xaa	Phe	Ala	Lys	Met	Leu	Arg	Xaa	Ser	Tyr	Pro	Xaa
			100					105					110		
Glu	Leu	Gln	Val	Ser	Ala	Gly	Cys	Glu	Val	His	Pro	Gly	Asn	Ala	Xaa
		115					120					125			
Asn	Asn	Phe	Phe	His	Val	Ala	Phe	Gln	Gly	Lys	Asp	Ile	Leu	Ser	Phe
	130					135					140				
Gln	Gly	Thr	Ser	Trp	Glu	Pro	Thr	Gln	Glu	Ala	Pro	Leu	Trp	Val	Asn
145					150					155					160
Leu	Ala	Ile	Gln	Val	Leu	Asn	Gln	Xaa	Lys	Xaa	Thr	Arg	Glu	Thr	Val
			165					170						175	
Gln	Xaa	Leu	Leu	Asn	Gly	Thr	Cys	Pro	Gln	Phe	Val	Ser	Gly	Leu	Leu
			180					185					190		
Glu	Ser	Gly	Lys	Ser	Glu	Leu	Lys	Lys	Gln	Val	Lys	Pro	Lys	Ala	Trp
		195					200					205			
Leu	Ser	Arg	Gly	Pro	Xaa	Pro	Gly	Pro	Gly	Arg	Xaa	Leu	Leu	Xaa	Cys
	210					215					220				
His	Val	Ser	Gly	Phe	Tyr	Pro	Lys	Pro	Val	Trp	Val	Lys	Trp	Met	Xaa
225					230					235					240
Gly	Glu	Gln	Glu	Gln	Gln	Gly	Thr	Gln	Pro	Gly	Asp	Xaa	Leu	Pro	Asn
			245						250					255	
Ala	Asp	Glu	Thr	Trp	Tyr	Leu	Arg	Ala	Thr	Leu	Xaa	Xaa	Val	Ala	Gly
			260					265					270		
Glu	Ala	Ala	Gly	Leu	Ser	Cys	Arg	Val	Lys	His	Ser	Ser	Leu	Glu	Gly
		275					280					285			
Gln	Asp	Xaa	Val	Leu	Tyr	Trp	Gly	Gly	Xaa	Tyr	Thr	Ser	Met	Gly	Leu
	290					295					300				
Ile	Xaa	Leu	Xaa	Val	Leu	Ala	Cys	Leu	Leu	Phe	Leu	Leu	Ile	Val	Gly
305					310					315					320
Xaa	Thr	Ser	Arg	Phe	Lys	Arg	Gln	Thr	Ser	Tyr	Gln	Xaa	Xaa	Leu	
				325					330					335	

<210> 13
 <211> 210
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> (1)..(210)
 <223> Wherein Xaa is any amino acid.

<400> 13
 Lys Cys Val Gln Ser Xaa Lys Pro Ser Leu Met Ile Gln Lys Ala Xaa
 1 5 10 15
 Xaa Gln Ala Leu Arg Lys Met Glu Pro Lys Asp Lys Asp Gln Glu Val
 20 25 30
 Leu Leu Gln Thr Phe Leu Asp Asp Ala Ser Pro Gly Asp Xaa Arg Xaa
 35 40 45
 Ala Ala Xaa Leu Met Xaa Xaa Arg Ser Pro Ser Gln Ala Asp Xaa Asn
 50 55 60
 Lys Ile Val Gln Xaa Leu Pro Trp Glu Gln Asn Glu Gln Val Lys Asn
 65 70 75 80
 Xaa Val Ala Xaa His Ile Ala Asn Xaa Leu Asn Ser Glu Glu Xaa Asp
 85 90 95
 Xaa Gln Asp Leu Lys Lys Leu Val Xaa Glu Ala Xaa Lys Glu Ser Gln
 100 105 110
 Leu Pro Thr Val Met Asp Phe Arg Lys Phe Ser Arg Asn Tyr Gln Leu
 115 120 125
 Tyr Lys Ser Val Xaa Leu Pro Ser Leu Asp Pro Xaa Ser Xaa Lys Ile
 130 135 140
 Glu Gly Asn Leu Xaa Phe Asp Pro Asn Asn Xaa Leu Pro Lys Glu Ser
 145 150 155 160
 Met Xaa Xaa Thr Thr Leu Thr Ala Phe Gly Phe Ala Ser Xaa Asp Xaa
 165 170 175
 Xaa Glu Ile Xaa Leu Glu Gly Lys Gly Phe Glu Pro Thr Leu Xaa Ala
 180 185 190
 Xaa Phe Gly Lys Gln Xaa Phe Phe Pro Xaa Ser Val Asn Lys Ala Leu
 195 200 205
 Tyr Trp
 210

<210> 14
 <211> 301
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> (1)..(301)
 <223> Wherein Xaa is any amino acid.

<400> 14

Phe Ser Tyr Asn Asn Lys Tyr Gly Met Val Ala Gln Val Thr Gln Thr
1 5 10 15
Leu Lys Leu Glu Asp Thr Pro Lys Ile Asn Ser Arg Phe Phe Gly Glu
20 25 30
Gly Thr Xaa Lys Met Gly Leu Ala Xaa Glu Ser Thr Lys Ser Thr Ser
35 40 45
Pro Pro Lys Xaa Ala Glu Ala Val Xaa Xaa Xaa Leu Gln Glu Leu Lys
50 55 60
Lys Leu Thr Ile Ser Xaa Gln Xaa Ile Gln Arg Ala Xaa Leu Phe Asn
65 70 75 80
Xaa Xaa Val Thr Glu Leu Arg Gly Leu Ser Asp Glu Ala Val Thr Ser
85 90 95
Xaa Leu Pro Gln Leu Ile Glu Xaa Ser Ser Pro Xaa Xaa Leu Gln Ala
100 105 110
Leu Val Gln Cys Gly Xaa Pro Gln Cys Ser Thr His Ile Xaa Gln Xaa
115 120 125
Leu Lys Xaa Val His Ala Asn Pro Leu Leu Ile Asp Val Val Thr Tyr
130 135 140
Leu Val Ala Leu Xaa Pro Glu Pro Ser Ala Gln Gln Xaa Arg Glu Ile
145 150 155 160
Phe Asn Met Ala Arg Xaa Gln Arg Ser Arg Ala Thr Leu Tyr Ala Leu
165 170 175
Ser His Ala Val Asn Asn Tyr His Lys Xaa Asn Pro Xaa Gly Thr Gln
180 185 190
Glu Leu Xaa Asp Ile Ala Asn Xaa Leu Met Glu Gln Ile Gln Asp Asp
195 200 205
Cys Xaa Gly Asp Glu Asp Tyr Thr Tyr Leu Xaa Leu Arg Xaa Ile Gly
210 215 220
Asn Met Gly Gln Thr Met Glu Gln Leu Thr Pro Glu Leu Lys Ser Xaa
225 230 235 240
Ile Leu Lys Cys Val Gln Ser Thr Lys Pro Ser Xaa Xaa Ile Gln Lys
245 250 255
Ala Ala Ile Gln Xaa Leu Arg Lys Met Glu Pro Lys Asp Lys Asp Gln
260 265 270
Xaa Xaa Xaa Leu Gln Thr Phe Leu Asp Asp Ala Ser Pro Gly Asp Lys
275 280 285
Arg Leu Ala Ala Tyr Leu Met Leu Xaa Arg Ser Pro Ser
290 295 300

<210> 15

<211> 335

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> (1)..(335)

<223> Wherein Xaa is any amino acid.

<400> 15

Met Gly Cys Leu Leu Phe Leu Leu Leu Trp Ala Leu Leu Gln Ala Trp
1 5 10 15

Gly Ser Ala Glu Val Pro Gln Arg Leu Phe Pro Leu Arg Cys Leu Gln
20 25 30

Ile Ser Ser Phe Ala Asn Ser Ser Trp Thr Arg Thr Asp Gly Leu Ala
35 40 45

Trp Leu Gly Glu Leu Gln Thr His Xaa Trp Ser Asn Asp Ser Asp Thr
50 55 60

Val Arg Xaa Xaa Lys Pro Trp Ser Gln Gly Thr Phe Ser Asp Gln Gln
65 70 75 80

Trp Glu Thr Leu Gln His Ile Phe Arg Val Tyr Arg Ser Ser Phe Thr
85 90 95

Xaa Asp Xaa Lys Glu Xaa Ala Lys Xaa Xaa Arg Leu Ser Tyr Pro Leu
100 105 110

Glu Leu Gln Xaa Ser Ala Gly Cys Glu Xaa His Pro Gly Asn Ala Ser
115 120 125

Asn Asn Phe Phe His Val Ala Phe Gln Gly Lys Asp Ile Leu Ser Phe
130 135 140

Gln Gly Thr Ser Xaa Glu Pro Xaa Gln Glu Ala Pro Xaa Trp Val Asn
145 150 155 160

Leu Ala Xaa Gln Xaa Leu Asn Gln Asp Lys Trp Thr Xaa Glu Thr Xaa
165 170 175

Gln Trp Leu Leu Asn Gly Thr Cys Pro Gln Phe Val Ser Gly Leu Leu
180 185 190

Glu Ser Gly Lys Ser Glu Leu Lys Lys Gln Val Lys Pro Lys Xaa Trp
195 200 205

Leu Ser Arg Gly Pro Xaa Pro Xaa Pro Gly Arg Leu Leu Leu Xaa Cys
210 215 220

His Val Ser Gly Xaa Tyr Pro Lys Pro Val Trp Val Lys Trp Xaa Xaa
225 230 235 240

Gly Glu Gln Glu Gln Gln Gly Thr Gln Pro Xaa Asp Xaa Xaa Pro Asn
245 250 255

Xaa Asp Glu Thr Trp Tyr Leu Arg Ala Thr Leu Xaa Val Xaa Ala Gly
260 265 270

Glu Ala Xaa Gly Leu Ser Cys Arg Val Lys His Ser Ser Leu Xaa Gly
275 280 285

Gln Asp Ile Val Leu Tyr Trp Gly Gly Ser Tyr Thr Ser Met Gly Leu
290 295 300

Ile Ala Leu Ala Val Leu Ala Cys Leu Leu Phe Leu Leu Ile Val Gly
 305 310 315 320

Phe Thr Ser Arg Phe Lys Arg Gln Thr Ser Tyr Gln Gly Val Leu
 325 330 335

<210> 16
 <211> 335
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> (1)..(335)
 <223> Wherein Xaa is any amino acid.

<400> 16
 Met Gly Cys Leu Leu Phe Leu Leu Leu Trp Ala Leu Leu Gln Ala Trp
 1 5 10 15

Gly Ser Ala Glu Val Pro Gln Arg Leu Phe Pro Leu Arg Cys Leu Gln
 20 25 30

Ile Ser Ser Phe Ala Asn Ser Ser Trp Thr Xaa Thr Asp Gly Leu Ala
 35 40 45

Xaa Leu Gly Glu Leu Gln Thr His Ser Trp Ser Xaa Asp Ser Asp Thr
 50 55 60

Xaa Xaa Xaa Leu Lys Pro Trp Ser Gln Gly Thr Phe Ser Xaa Gln Xaa
 65 70 75 80

Trp Glu Thr Leu Xaa His Ile Phe Xaa Xaa Tyr Arg Ser Ser Phe Thr
 85 90 95

Arg Asp Val Lys Glu Phe Ala Lys Xaa Leu Arg Leu Ser Tyr Pro Xaa
 100 105 110

Glu Leu Gln Xaa Xaa Ala Gly Cys Glu Val His Pro Gly Xaa Ala Ser
 115 120 125

Asn Asn Phe Phe His Xaa Ala Xaa Gln Gly Xaa Asp Ile Leu Ser Phe
 130 135 140

Gln Gly Thr Ser Trp Glu Pro Thr Gln Glu Ala Pro Xaa Trp Val Asn
 145 150 155 160

Leu Ala Ile Gln Xaa Leu Asn Gln Asp Lys Trp Thr Arg Xaa Thr Val
 165 170 175

Gln Trp Leu Leu Asn Gly Thr Cys Pro Gln Phe Val Ser Gly Leu Leu
 180 185 190

Glu Xaa Gly Lys Xaa Glu Leu Lys Lys Gln Xaa Lys Pro Lys Ala Xaa
 195 200 205

Leu Ser Arg Gly Pro Ser Pro Gly Pro Gly Arg Leu Leu Leu Val Cys
 210 215 220

His Val Xaa Gly Phe Tyr Pro Lys Pro Val Trp Xaa Lys Trp Xaa Arg
 225 230 235 240

Gly Glu Gln Glu Gln Gln Gly Thr Gln Pro Gly Asp Ile Leu Pro Asn

				245					250					255		
Xaa	Asp	Glu	Thr	Trp	Tyr	Leu	Arg	Ala	Thr	Leu	Asp	Xaa	Xaa	Ala	Gly	
			260					265					270			
Glu	Ala	Ala	Gly	Leu	Xaa	Cys	Arg	Val	Lys	His	Ser	Ser	Leu	Glu	Gly	
		275					280					285				
Gln	Xaa	Xaa	Xaa	Leu	Tyr	Trp	Gly	Gly	Ser	Tyr	Thr	Ser	Met	Gly	Leu	
	290					295					300					
Ile	Ala	Leu	Ala	Val	Leu	Ala	Cys	Leu	Xaa	Phe	Leu	Leu	Ile	Val	Gly	
305					310					315					320	
Phe	Thr	Ser	Arg	Phe	Lys	Arg	Gln	Thr	Ser	Tyr	Gln	Gly	Val	Leu		
				325					330					335		